

**Amendments to the claims**

This listing of claims will replace all prior versions and listings, of claims in the application:

**Listing of Claims:**

1. (Currently amended) An improved electrolyte for the electrolysis of alumina ( $\text{Al}_2\text{O}_3$ ), the electrolyte comprising a mixture of aluminum fluoride ( $\text{AlF}_3$ ) and potassium fluoride (KF), and NaF comprises no more than 2 weight percent of the electrolyte.
2. (Currently amended) The electrolyte recited in claim 1 wherein the potassium fluoride (KF) to aluminum fluoride ( $\text{AlF}_3$ ) is present in a molar ratio with potassium fluoride (KF) greater than 1:1 ranges from about 1.0 to 1.5.
3. (Currently Amended) The electrolyte recited in claim 1, the electrolyte further comprising from about 2 4 to 6 wt. % of aluminum oxide (alumina/ $\text{Al}_2\text{O}_3$ ).
4. (Currently amended) The electrolyte as recited in claim 1 wherein the concentrations of the electrolyte components remain relatively constant during electrolysis.
5. (Original) The electrolyte as recited in claim 1 where the electrolyte is used to electrolyze the alumina to aluminum at from 660°C to 1000°C.
6. (Original) The electrolyte as recited in claim 3 wherein the electrolyte remains liquid during electrolysis.

7. (Original) The electrolyte as recited in claim 6 wherein inert anodes and wettable cathodes can be used with the electrolyte.

Claims 8-20 (Canceled)